

AMENDMENTS TO THE CLAIMS

Please amend the claims as they currently stand so that they are in accord with the following listing of the claims:

Claim 1 (currently amended): A stimulation arrangement, comprising:

a stimulation unit to deliver electrical stimulation pulses for stimulating body tissue; and
an evaluation unit to receive at least one electrical signal in conjunction with the delivery of a stimulation pulse and to evaluate said received electrical signal for checking both stimulation success and lack of stimulation success, and wherein the evaluation unit is capable of detect[[s]]ing first signal features in the received electrical signal that characterize a case of lack of stimulation success, and deliver[[s]]ing a corresponding first output signal, and wherein the evaluation unit is capable of detecting second signal features in the received electrical signal that characterize a case of stimulation success, and delivering a corresponding second output signal.

Claim 2 (previously presented): The stimulation arrangement of claim 1, wherein the evaluation unit associates the received electrical signal with a stimulation pulse in respect of time and detects a feature of a polarization artifact as a signal feature in the received electrical signal.

Claim 3 (previously presented): The stimulation arrangement of claim 2, wherein the evaluation unit evaluates the received electrical signal measured after the expiry of a blanking period after the delivery of a stimulation pulse to determine a first integral (INGR1) of the measured signal over a first time interval in which the measured signal extends above a blanking level measured during the blanking period.

Claim 4 (previously presented): The stimulation arrangement of claim 3, wherein the evaluation unit determines a second integral (INGR2) of the measured signal over a second time interval beginning with an end of said first time interval and extending to an end of a predetermined time window whose beginning is an end of the blanking period.

Claim 5 (previously presented): The stimulation arrangement of claim 3, wherein the received electrical signal received after the delivery of said stimulation pulse is received in a form of time-discrete sample values, and wherein the evaluation unit further comprises a counter that determines a number (CNT1) of said sample values of the received electrical signal, which fall into the first time interval over which the first integral is formed.

Claim 6 (previously presented): The stimulation arrangement of claim 4, wherein the evaluation unit forms an indicator flag (CROSS) having a binary value that depends on whether the measured signal during the second time interval crosses the measured blanking level.

Claim 7 (cancelled)

Claim 8 (previously presented): The stimulation arrangement of claim 6, wherein the evaluation unit continuously compares said sample values of said received electrical signal to a limit value (z_n) for negative signal amplitude and delivers a signal that characterizes a stimulation success in the case of the limit value (z_n) being negatively exceeded by at least one of said sample values.

Claims 9-13 (cancelled)

Claim 14 (previously presented): The stimulation arrangement of claim 1, wherein the evaluation unit continuously compares sample values of said received electrical signal to a limit value (z_n) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (z_n) being negatively exceeded by at least one of said sample values.

Claim 15 (previously presented): The stimulation arrangement of claim 2, wherein the evaluation unit continuously compares sample values of said received electrical signal to a limit value (z_n) for negative signal amplitude and delivers a signal which characterizes a

stimulation success in the case of the limit value (zn) being negatively exceeded by at least one of said sample values.

Claim 16 (previously presented): The stimulation arrangement of claim 3, wherein the evaluation unit continuously compares sample values of said received electrical signal to a limit value (zn) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (zn) being negatively exceeded by at least one of said sample values.

Claim 17 (previously presented): The stimulation arrangement of claim 4, wherein the evaluation unit continuously compares sample values of said received electrical signal to a limit value (zn) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (zn) being negatively exceeded by at least one of said sample values.

Claim 18 (previously presented): The stimulation arrangement of claim 5, wherein the evaluation unit continuously compares said sample values of said received electrical signal to a limit value (zn) for negative signal amplitude and delivers a signal which characterizes a stimulation success in the case of the limit value (zn) being negatively exceeded by at least one of said sample values.

Claims 19-25 (cancelled)

Claim 26 (previously presented): The stimulation arrangement of claim 6 wherein an area value (AREA) is calculated as a sum of said INGR1 and said INGR2 if said CNT1 is greater than a predetermined sample number limit value (w1), and wherein said area value (AREA) is calculated as said INGR2 if said CNT1 is less than or equal to said w1.

Claim 27 (previously presented): The stimulation arrangement of claim 26 wherein said evaluation unit delivers a signal that characterizes a lack of stimulation success if said AREA is determined to be less than a first predetermined area limit value (a1).

Claim 28 (previously presented): The stimulation arrangement of claim 27 wherein said evaluation unit delivers a signal that characterizes a lack of stimulation success if said CNT1 is greater than said w1 and if a maximum positive sample value (MAX_POS) of said measured signal, measured at least x samples after said blanking period, is less than a predetermined amplitude limit value (zp), and where x is a predetermined number of samples.

Claim 29 (previously presented): The stimulation arrangement of claim 28 wherein said evaluation unit delivers a signal that characterizes a stimulation success if said CNT1 is greater than said w1 and if said maximum positive sample value (MAX_POS) of said measured signal, measured at least x samples after said blanking period, is greater than or equal to said predetermined amplitude limit value (zp).

Claim 30 (previously presented): The stimulation arrangement of claim 29 wherein said evaluation unit delivers a signal that characterizes a stimulation success if said AREA is greater than a second predetermined area limit value (a2).

Claim 31 (previously presented): The stimulation arrangement of claim 30 wherein said evaluation unit delivers a signal that characterizes a stimulation success if said CROSS is equal to a binary value indicating that said measured signal has crossed said measured blanking level during said second time interval.

Claim 32 (previously presented): The stimulation arrangement of claim 31 wherein said evaluation unit delivers a signal that characterizes a lack of stimulation success.

Claim 33 (new): A stimulation arrangement, comprising:
a stimulation unit to deliver electrical stimulation pulses for stimulating body tissue; and

an evaluation unit to receive at least one electrical signal in conjunction with the delivery of a stimulation pulse and to evaluate said received electrical signal for checking stimulation success, and wherein the evaluation unit detects signal features in the received electrical signal that characterize a case of lack of stimulation success, and delivers a corresponding output signal,

and wherein the evaluation unit associates the received electrical signal with a stimulation pulse in respect of time and detects a feature of a polarization artifact as a signal feature in the received electrical signal,

and wherein the evaluation unit evaluates the received electrical signal measured after the expiry of a blanking period after the delivery of a stimulation pulse to determine a first integral (INGR1) of the measured signal over a first time interval in which the measured signal extends above a blanking level measured during the blanking period.